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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,152	10/27/2000	Chisa Hayakawa	01165.0799	1720

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FINNEGAN, HENDERSON, FARABOW, GARRETT &
DUNNER LLP
1300 I STREET, NW
WASHINGTON, DC 20005

EXAMINER

PIERCE, JEREMY R

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 06/19/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/674,152

Applicant(s)

HAYAKAWA ET AL.

Examiner

Jeremy R. Pierce

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is more than 150 words and contains two paragraphs. Appropriate abstracts contain less than 150 words and consist of only one paragraph. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 7-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot have dependence on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 7-10 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "the surface side" on the fabric. There is insufficient antecedent basis for this limitation in the claim. This is confusing because it is unclear which side of the fabric would be considered the "surface side" in the claim.

Claim 5 is vague and indefinite. Claim 5 recites, "the yarn forming the fabric is a multi-layered structure yarn having two layers or more, the outermost layer of the yarn is a synthetic fiber". In what way is the yarn multi-layered? If the yarn were to have an "outermost layer", one would assume that it is sheath-core type yarn. However, the specification lists several ways to form a composite yarn, including false twisting, elongation difference false twisting, union twisting subsequent to false twisting, etc. (page 20, lines 23-30). The Examiner must assume that a yarn with a white-pigmented sheath surrounding a water-diffusing core would meet the limitations of the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiba et al. (U.S. Patent No. 5,126,201).

Shiba et al. disclose an absorbent article comprising a nonwoven fabric containing a conjugate fiber, where the conjugate fiber has inorganic material incorporated therein (column 3, lines 1-12). The inorganic material, such as titanium oxide (column 4, line 10) is incorporated into the core component of the conjugate fiber in an amount of at least 1.5% by weight and is incorporated into the sheath component

of the conjugate fiber in an amount not to exceed 1.0% by weight (column 3, lines 35-68). With regard to claim 2, Shiba et al. disclose the nonwoven fabric can contain between 40 and 100% by weight of the fabric (column 5, lines 24-27). With regard to claim 3, Shiba et al. disclose the nonwoven fabric can have multiple layers (column 5, lines 35-39), and use examples where the nonwoven fabric containing conjugate fibers is used as the surface layer (column 6, lines 35-41). With regard to claim 4, the fabric can be a single layered structure, and water-absorbent and water-diffusing fibers would be present when the cross-sectional shapes of the conjugate fibers takes on an irregular shape (column 4, lines 44-53). With regard to claim 5, the limitations are met because Shiba et al. disclose the core may be irregular cross-section (column 4, line 47), which would allow it to diffuse and absorb water. Additionally, the sheath portion of the fiber can contain 1.0% inorganic material, which would also meet the claim limitations.

7. Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Tokura (Japanese Patent No. 5-44,160).

Tokura teaches a synthetic fiber that is capable of absorbing and diffusing water (Section 19). An amount 0.5 to 8% by weight of titanium oxide is incorporated into the fabric (Sections 25 and 27). The fibers of the fabric would act as both the white-pigment fibers and the water-diffusing and water-absorbing fibers.

8. Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Niwa et al. (Japanese Patent No. 9-119,005).

Niwa et al. disclose a fabric composed of a synthetic fiber that does not become as transparent as other fibers when wet (Section 2). A bicomponent fiber has 3 to 30% by weight titanium oxide or other white pigment incorporated therein (Section 8). The bicomponent fiber makes up between 50 and 95% of the fabric weight, with the other weight coming from elastic yarn, such as polyurethane (Section 12). The water-diffusing and water-absorbing properties would be present in the fabric because the fibers are made of irregular cross-section (Section 17).

9. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(a) as being anticipated by Tomosuke et al. (Japanese Patent No. 9-273,085).

See claims 1-3 of Tomosuke et al.

Conclusion

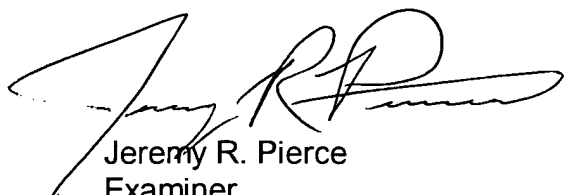
10. English translations have been provided for the Japanese Patents, two of which appeared in Applicant's I.D.S. from Paper No. 1 with no translation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703) 605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Jeremy R. Pierce
Examiner
Art Unit 1771

June 12, 2002


ELIZABETH M. COLE
PRIMARY EXAMINER